

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 8. (Cancelled)

9. (Currently Amended): A method for providing a continuously variable clean dry air (CDA) flow in a semiconductor processor for substrate processing, comprising the steps of:

sensing temperature measurements at selected points;

proportionally adjusting a continuously variable CDA flow based upon the sensed temperature measurements; and

actively controlling a dome temperature so as to maintain ~~maintaining~~ a predefined temperature inside a dome of the semiconductor processor during the time that the processor is processing substrates and when substrate processing is idle, wherein said active control includes said proportional adjustment of said continuously variable CDA flow.

10. (Previously Presented): The method of Claim 9 further comprising the steps of:

maintaining a supply of heat comprising the continuously variable CDA flow at the predefined temperature.

11. (Previously Presented): The method of Claim 9 further comprising the steps of: utilizing a heat exchanger to regulate the amount of heat provided to a chamber surface of the semiconductor processor.

12. (Previously Presented): The method of Claim 9 further comprising the steps of: utilizing one or more temperature sensors and a CDA flow controller for controlling upward and downward fluctuations from the predefined temperature of the dome of the semiconductor processor.

13. (Previously Presented): The method of Claim 9 further comprising the steps of: utilizing one or more temperature sensors and a CDA flow controller for controlling upward and downward fluctuations in the heat provided to the dome of the semiconductor processor.

14. (Previously Presented): The method of Claim 9 further comprising the steps of: maintaining a supply of air comprising the continuously variable CDA flow at a predefined quantity of heat provided to the dome of the semiconductor processor.

15. (Currently Amended): A method for semiconductor processing, comprising the steps of: providing a domed process chamber having a support, a process gas distributor, and an exhaust; ~~and~~

continuously varying a clean dry air (CDA) flow responsive to temperatures changes in the domed process chamber; and

actively controlling a dome temperature such that a said dome temperature is stabilized in accordance with a preset temperature during a semiconductor manufacturing process and when processing is idle, wherein said active control includes said continuous varying of said CDA flow.

16. (Previously Presented): The method of Claim 15, further comprising:

driving an antenna of a plasma reactor chamber by RF energy inductively coupled inside

the domed process chamber.
17. (Previously Presented): The method of Claim 16, further comprising:

generating a low energy plasma by the antenna for etching metals, dielectrics and

semiconductor materials.
18. (Previously Presented): The method of Claim 16 further comprising:

applying an auxiliary RF bias energy to a wafer support cathode to control a cathode

sheath voltage and the ion energy independent of a plasma density in the plasma reactor

chamber.
19. (Previously Presented): The method of Claim 15 further comprising:

idling the semiconductor manufacturing process.